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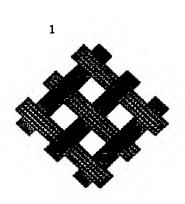
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(54) Title: EXTERNAL PRESSURE TYPE HOLLOW FIBER MEMBRANE HAVING REINFORCING SUPPORTER WITH MONO-FILAMENT FOR GAS SEPARATION AND WATER TREATMENT, AND METHOD AND APPARATUS FOR PREPARING THE SAME



(57) Abstract: Disclosed are external pressure type hollow fiber membrane having a reinforcing supporter for gas separation and water treatment, and method and apparatus for preparing the same. The reinforcing supporter is woven only with mono-filaments or by mixed spinning of mono-filaments and multi-filaments. The hollow fiber membrane of the present invention has excellent pressure resistance and high tension force by using the rigid and tubular supporter, an improved softness by using the mono-filaments, and an increased bonding force between the supporter and the coating layer by increasing the concave-convexo degree of the reinforcing supporter. Additionally, the hollow fiber membrane can prevent detachment of the separating filtration layer, which is the coating layer, through the surface weight deduction treatment of the reinforcing supporter, and control the inner pore size of the membrane by treating the internal coagulating solution, thereby providing an excellent water-permeability.







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